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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/533,380	03/20/2006	Hakan Engqvist	1209-0149PUS1	9425
2292 7590 10/12/2007 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			EXAMINER KOSLOW, CAROL M	
			ART UNIT 1793	PAPER NUMBER
			NOTIFICATION DATE 10/12/2007	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary

Application No.

10/533,380

Applicant(s)

ENGQVIST ET AL.

Examiner

C. Melissa Koslow

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 March 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>4/2005.3/2006</u> . | 6) <input type="checkbox"/> Other: ____. |

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Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Sweden on 31 December 2002. It is noted, however, that applicant has not filed a certified copy of the Swedish application as required by 35 U.S.C. 119(b).

The information disclosure statement filed 29 April 2005 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: The subject matter of claim 7 is not found in the specification.

The narrow number ranges in claims 2-4, 8 and 11 and the phrases in claims 12 and 14 after the terms "even more preferred", "most preferred" and "preferably" have been given no patentable weight. This is because the number range after the terms are examples of the broad term or range and claims are given their broadest interpretation. Applicants may add dependent or independent claims directed to the above narrow phrase or range.

Claim 6 is objected to because of the following informalities: The " Al_2O_3 " in this claims should be rewritten as " Al_2O_3 ". In the last line of this claims "1, μm " should be rewritten as "1 μm ,". Appropriate correction is required.

Claims 5-7, 10, 11, 13 and 15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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Claims 5 and 6 recite the limitation "the inorganic phase". There is insufficient antecedent basis for this limitation in the claim or in claim 1. In addition it is unclear what is meant by "the inorganic phase". It is unclear if this is the inorganic cement of claim 1, or if it is the raw material as taught in the specification. If it the raw material, then these claims are improperly depend since claim 1 is directed to the chemically bonded material where the cement has hydrated to form a solid body. Regarding claim 6, the phrase "i.e." renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d). Regarding claim 7, the phrase "preferably" renders the claim indefinite because it is unclear whether the compositional and content limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d). Claim 10 is indefinite as to what is the composition of the "some other phase" The wording of claim 11 makes this claim difficult to understand and thus it is indefinite. Page 4 of the specification teaches the element has a total porosity of below 10%, where the 90% of the pores are minipores having a diameter of less than 0.5 microns. Claim 13 is indefinite since it is unclear how the solid body is a bone cement since it cannot react. Finally, claim 15 is indefinite since it is unclear what is meant by "in connection with the preparation of the element of claim 1" and the claim uses the references number (3) for both the second container and the openable closure. The specification and figure 4 does not teach a references number for the openable closure.

The Examiner is interpreting the inorganic phase of claims 5 and 6 as the cement and that the cement is a calcium aluminate cement.

A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v.*

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Eagle Mfg. Co., 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

Claims 1-15 are provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1-15 of copending Application No. 11/180,585. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

The claims in each application are identical to each other.

Claim 15 is provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claim 63 of copending Application No. 10/518,083. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

Claim 15 is provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claim 21 of copending Application No. 10/518,080. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

The devices in these applications and that of claim 15 are identical.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

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A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-6, 8, 10 and 12 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-3 and 11 of U.S. Patent No. 6,620,232. Although the conflicting claims are not identical, they are not patentably distinct from each other because the patented dental filling element is composed of a chemically bonded calcium aluminate cement and 1-20 vol% of silica particles having a particle size of less than 100 nm, which means the distance between added silica filler particles and unreacted cement, which appears to be 0%, is 0.001-0.4 microns, which falls within the claimed ranges. The silica particles separates the formed hydrated and the taught chemically bonded element has a dimension change of less than 0.1 % linear change which means that exerts a pressure or tensile fore that overlaps the claimed range.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 15 is rejected under 35 U.S.C. 102(b) as being anticipated by U.S. patent 4,772,326 or 3,536,191.

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Both of these references teach devices comprising a first container that can contain a cement powder, a second container that contains the liquid for hydrating the cement and an openable closure between the containers. The references teach the claimed device.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6, 8, 10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 00/21489 or WO 01/76534.

The references teach a chemically bond ceramic element, which can be dental filling material, comprising a calcium aluminate cement and 1-20 vol% of silica particles having a particles size of 100 nm. The element can have zero expansion, which means it has the property of claim 4. The distance between added silica filler particles and unreacted cement, which appears to be 0%, is 0.001-0.4 microns, which falls within the claimed ranges. The silica particles separates the formed hydrated calcium aluminate. The references suggest the claimed element.

Claims 1-6, 8, 10, 12 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 01/76535.

The reference teach a chemically bond ceramic element or component, which can be dental filling material, comprising a calcium aluminate cement and 1-20 vol% of silica particles having a particles size of 100 nm. The element can have zero expansion, which means it has the property of claim 4. The distance between added silica filler particles and unreacted cement,

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which appears to be 0%, is 0.001-0.4 microns, which falls within the claimed ranges. The silica particles separates the formed hydrated calcium aluminate. The references suggest the claimed element.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melissa Koslow whose telephone number is (571) 272-1371. The examiner can normally be reached on Monday-Friday from 8:00 AM to 3:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo, can be reached at (571) 272-1233.

The fax number for all official communications is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

cmk
September 21, 2007


C. Melissa Koslow
Primary Examiner
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